

WHAT IS CLAIMED IS:

1. An electronic device comprising:
an oxide layer;
5 wherein the oxide layer comprises an oxide comprising an element from group IIa, an element from group IIb and an element from group IIIb.
2. The electronic device according to claim 1, further comprising
a first electrode layer,
10 a second electrode layer having a light-transmitting property, and
a semiconductor layer being provided between the first electrode layer and the second electrode layer and functioning as a light-absorption layer,
wherein the oxide layer is provided between the semiconductor layer
15 and the second electrode layer, and the electronic device functions as a solar cell.
3. The electronic device according to claim 1, wherein the element from group IIa in the oxide is at least one element selected from the group consisting of Be, Mg, Ca, Sr and Ba, the element from group IIb in the oxide is Zn, and the element from group IIIb in the oxide is at least one element selected from the group consisting of B, Al, Ga and In.
4. The electronic device according to claim 3, wherein a composition
25 ratio of the element from group IIIb in the oxide is smaller than a sum of a composition ratio of the element from group IIa and that of the element from group IIb in the oxide.
5. The electronic device according to claim 3, wherein a composition
30 ratio of the element from group IIa in the oxide is smaller than that of the element from group IIb in the oxide.
6. The electronic device according to claim 4, wherein the composition
35 ratio of the element from group IIa in the oxide is smaller than that of the element from group IIb in the oxide.
7. The electronic device according to claim 1, wherein the oxide further

comprises an element from group Vb.

8. The electronic device according to claim 2, wherein the semiconductor layer comprises a semiconductor whose main constituent elements are an element from group Ib, an element from group IIIb and an element from group VIb, and the semiconductor layer and the oxide layer are layered.

9. A method for manufacturing an electronic device comprising an oxide layer, the method comprising:

forming the oxide layer by sputtering using at least one target comprising an oxide of an element from group IIa, an oxide of an element from group IIb and an oxide of an element from group IIIb.

10. The method for manufacturing an electronic device according to claim 9, wherein the target is a sintered body of the oxide of the element from group IIa, the oxide of the element from group IIb and the oxide of the element from group IIIb.

11. The method for manufacturing an electronic device according to claim 9, wherein the sputtering is direct-current sputtering.

12. The method for manufacturing an electronic device according to claim 9, wherein the sputtering is carried out in an atmosphere containing a rare gas and oxygen.

13. The method for manufacturing an electronic device according to claim 9, wherein the sputtering is carried out in an atmosphere containing at least one selected from the group consisting of a H₂O gas and a D₂O gas.

14. The method for manufacturing an electronic device according to claim 9, wherein the sputtering is carried out in an atmosphere containing a nitrogen gas.

15. The method for manufacturing an electronic device according to claim 12, wherein the sputtering is carried out in an atmosphere containing at least one selected from the group consisting of a H₂O gas and a D₂O gas.

16. The method for manufacturing an electronic device according to claim 12, wherein the sputtering is carried out in an atmosphere containing a nitrogen gas.

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17. The method for manufacturing an electronic device according to claim 15, wherein the sputtering is carried out in an atmosphere containing a nitrogen gas.